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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/709,408 05/03/2004 00173.0030.NPUS01 Christer Peterson 1784 28694 7590 10/05/2005 EXAMINER NOVAK DRUCE & QUIGG, LLP GOINS, DAVETTA WOODS 1300 EYE STREET NW ART UNIT **400 EAST TOWER** PAPER NUMBER WASHINGTON, DC 20005

2632 DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



	Application No.	Applicant(s)
Office Action Summary	10/709,408	PETERSON, CHRISTER
	Examiner	Art Unit
	Davetta W. Goins	2632
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on		
2a)☐ This action is FINAL . 2b)⊠ This action is non-final.		
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-11</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9)☐ The specification is objected to by the Examiner.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)☐ All b)☐ Some * c)☐ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list	of the certified copies not receive	ed.
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary	
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)
Paper No(s)/Mail Date	6) Other:	and producting 10-102/
J.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Office A	etlan Summer	d of Donor No (Mail D.). cooperate
Office A	ction Summary Pa	rt of Paper No./Mail Date 20051002

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DETAILED ACTION

Claim Objections

1. Claims1-11 are objected to because of the following informalities:

Claim 1 includes parenthesis that should be removed.

Claims 1-11 should be numbered without the brackets and the c before the number.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Fritz et al. (US Pat. 5,805,061).

In reference to claims 1-11, Fritz discloses the claimed means for applying a first voltage to a first amount of power lines for a first sub system in the trailer and means for measuring the individual currents consumed by components in the first sub system including means for comparing the level of the individual currents to a first predefined threshold; means for applying a second voltage to a second amount of power lines in the first sub system in the trailer; means for measuring the total current in the second amount of power lines; and decision means for comparing the total current in the second amount of power lines to a second threshold

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and thereby determining at least whether the trailer is present, which is met by an electronic flasher unit 10 comprising an integrated circuit 16 including eight external connector pins 1 to 8 that are to be connected to a trailer for controlling the trailer's lights. Specifically, a signal applied to the connector pin 6 is respectively applied to the non-inverting input of two comparators K₁ and K₇ and is respectively compared to respective reference voltages V₅ and V₇ that are applied to the respective inverting inputs of the comparators K_1 and K_7 . If the voltage applied to the connector pin 6 of the IC 16 exceeds the reference voltage, then the comparator K₇ provides a signal to one input of an OR-gate 24. Moreover, if the voltage present at the connector pin 6 exceeds the reference voltage V_{ref} , then the comparator K_1 provides its output signal first to a debouncing or chatter elimination circuit 25.1 and then from there to one input of an internal control unit 26. The rest of the connecting pins will compare the current and voltage as well to determine whether the output voltage from one end exceeds the threshold voltage and stores the information into control unit 26 (col. 4, lines 40-67; col. 5, lines 30-67; col. 6, lines 1-53; col. 7, lines 1-67). The trailer having additional flasher lamps is connected to the vehicle, then the load current in the flasher circuit will be increased due to the presence of the additional lamps. If the measuring shunt R₃ detects a lamp current flowing during directional blinking that is greater than the voltage threshold V_{ref2} but smaller than the short circuit control threshold V_{ref4}, i.e. the control unit 26 receives a signal at input IN4 but not at input IN6, in an example in which V_{refl} was initially established as the load failure control threshold, then the control unit 26 thereby recognizes that an additional load has been added to the flasher circuit, which is generally associated with the connection of a trailer having additional flasher lamps 19. The control unit 26 then adapts the load failure control threshold to Application/Control Number: 10/709,408 Page 4

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the presently flowing increased normal lamp current i.e. designates the voltage threshold V_{ref2} and input IN4 as the lamp failure threshold indicator for example. Thus, a lamp failure can still be detected in the next directional blinking operation by the absence of a signal at IN4 even though a signal may be present at IN3 since the flasher circuit now includes more than the usual number of flasher lamps. The initially programmed values are, however, maintained in the memory unit 29 (col. 11, lines 11-38).

- 4. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure as follows. Rigsby et al. (US Pat. 5,739,592), Bertalan et al. (US Pat. 6,130,487) and Robinson et al. (US Pat. 6,837,551 B2).
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 571-272-2957. The examiner can normally be reached on Mon-Fri with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davetta W. Goins Primary Examiner Art Unit 2632

D.W.G.

October 3, 2005

Davette Whow